

are deemed to meet the requirements of this section.

§ 1918.23 Jacob's ladders.

(a) Jacob's ladders shall be of the double rung or flat tread type. They shall be well maintained and properly secured.

(b) A Jacob's ladder shall either hang without slack from its lashings or be pulled up entirely.

(c) When a Jacob's ladder is used as the means of access to a barge being worked, spacers (bumpers) shall be hung between the vessel, barge, or other structure to which the barge is tied alongside, or other equally effective means shall be provided to prevent damage to the bottom rungs of the ladder.

(d) When a Jacob's ladder is being used so that there is a danger of an employee falling or being crushed between the vessel, barge, or other structure (pier), suitable protection shall be provided.

§ 1918.24 Fixed and portable ladders.

(a) There shall be at least one safe and accessible ladder for each gang working in a single hatch. An effective means of gaining a handhold shall be provided at or near the head of each vertical fixed ladder. No more than two ladders are required in any hatch regardless of the number of gangs present.

(b) When any fixed ladder is visibly unsafe (or known to be unsafe), the employer shall identify such ladder and prohibit its use by employees.

(c) Where portable straight ladders are used, they shall be of sufficient length to extend three feet (.91 m) above the upper landing surface, and be positively secured or held against shifting or slipping. When conditions are such that a straight ladder cannot be used, Jacob's ladders meeting the requirements of § 1918.23 may be used.

(d) For vessels built after July 16, 2001, when six inches (15.24 cm) or more clearance does not exist behind the rungs of a fixed ladder, the ladder shall be deemed "unsafe" for the purposes of this section. Alternate means of access (for example, a portable ladder) must be used.

(e)(1) Where access to or from a stowed deckload or other cargo is needed and no other safe means is available, ladders or steps of adequate strength shall be furnished and positively secured or held against shifting or slipping while in use. Steps formed by the cargo itself are acceptable when the employer demonstrates that the nature of the cargo and the type of stowage provides equivalent safe access.

(2) Where portable straight ladders are used they shall be of sufficient length to extend at least three feet (.91 m) above the upper landing surface.

(f) The following standards for existing manufactured portable ladders must be met:

(1) Rungs of manufactured portable ladders obtained before January 21, 1998 shall be capable of supporting a 200-pound (890 N) load without deformation.

(2) Rungs shall be evenly spaced from nine to sixteen and one-half inches (22.9 to 41.9 cm), center to center.

(3) Rungs shall be continuous members between rails. Each rung of a double-rung ladder (two side rails and a center rail) shall extend the full width of the ladder.

(4) Width between side rails at the base of the ladder shall be at least 12 inches (30.48 cm) for ladders 10 feet (3.05 m) or less in overall length, and shall increase at least one-fourth inch (0.64 cm) for each additional two feet (0.61 m) of ladder length.

(g) Portable manufactured ladders obtained after January 21, 1998 shall bear identification showing that they meet the appropriate ladder construction requirements of the following standards:

(1) ANSI A14.1-1990, Safety Requirements for Portable Wood Ladders;

(2) ANSI A14.2-1990, Safety Requirements for Portable Metal Ladders;

(3) ANSI A14.5-1992, Safety Requirements for Portable Reinforced Plastic Ladders.

(h) Job-made ladders shall:

(1) Have a uniform distance between rungs of at least 12 inches (30.48 cm) center to center;

(2) Be capable of supporting a 250-pound (1,112 N) load without deformation; and